Thousands of women sterilised in Sweden without consent

Claire Armstrong, *Stockholm*

The Swedish government is to investigate why thousands of women were forcibly sterilised on eugenic grounds from the 1930s up to the 1970s.

Margot Wallström, the minister of health and social affairs, condemned the acts as barbaric and said that a committee would investigate why the practice went on for so long and why it continued even after the horror of similar policies in Nazi Germany was revealed. The committee will also look into why many sterilisations were performed without consent on women who were having abortions.

The Swedish newspaper *Dagens Nyheter* revealed that up to 60 000 people were sterilised on the grounds of having "undesirable" racial characteristics or otherwise "inferior" qualities, such as very poor eyesight, mental retardation, or an "unhealthy sexual appetite." Most were in mental institutions—although by today's standards many would not be considered to be mentally ill—or in reform schools.

The 1926 Swedish law that allowed sterilisation without the consent of the patient was based on the outdated belief that social misbehaviour could be inherited. Politicians also argued on economic grounds that it was important to limit the size of families, especially those with a history of antisocial behaviour. Although the sterilisation law was a matter of public record, the programme has received scant attention until now.

Dagens Nyheter commented how eugenics had adherents in many countries but Sweden was the first in the world to "grant this pseudoscience official recognition," describing how Sweden established an institute of racial biology in 1921.

Kerstin Hagenfeldt, a specialist in reproductive health at the Karolinska Hospital, Sweden's foremost medical institute, said: "Society at the time thought that mental retardation was inherited, and there was concern about the children born to those people." She added: "You can look at any country—Britain, the United States, Germany—and see that respect for the autonomy and integrity of the individual is something that has developed in the past two decades."

The law was overturned in 1976, so now sterilisation is allowed only in men and women over 25 and only if they seek the operation themselves and are mentally competent enough to understand what the procedure will mean. Dr Hagenfeldt said that Sweden's long history of sterilisations in institutions means that the country now has much stricter laws than most other countries, such as the United States.

The government's investigation will focus on financial compensation for the victims. Since the early 1980s a handful of victims have demanded compensation, and the government has paid sums ranging from £3100 ($5000) to £4750, but only if there was a formal wrongdoing in the procedure—for example, if a doctor's signature was omitted. About half of the requests for compensation have been rejected, on the basis that they were carried out lawfully.

Similar allegations about forced sterilisations have also been recently uncovered in Switzerland, Austria, and Finland. In Finland researchers estimate that some 11 000 women were sterilised and around 4000 forced to have abortions between 1935 and 1970 on the grounds of racial cleansing or due to mental or physical impairments. □

PIGA PRESSFOTO

Margot Wallström said the sterilisation programme was barbaric

Karolinska professor broke research rules

Jacqui Wise, *BMJ*

The prestigious Karolinska Institute in Stockholm has announced that Ulf Lönn, an associate professor of oncology who has published in leading cancer journals, broke the established rules of research and may have deliberately manipulated data.

Dr Lönn's research showed that gene amplification was an excellent predictor of disease progression, particularly in breast cancer. However, an investigation carried out on behalf of the institute concluded that there were serious departures from established research practice. He kept no original documentation, even from experiments which were not yet published, so making it impossible for other researchers to verify his results.

The investigation also concluded that Dr Lönn must have actively manipulated data. "The faking that we consider we have revealed beyond all reasonable doubt continued for a long time and concerned a large number of samples."

The Karolinska Institute said, however, that, although there was much evidence that Dr Lönn had deliberately manipulated data, this could not be proved "beyond all reasonable doubt."

Dr Lönn ran a cancer research project between 1990 and 1996 at the department of experimental oncology at the Karolinska Hospital. During this time he published several articles in leading journals, including *International Journal of Cancer*, *Cancer*, *Breast Cancer Research and Treatment*, and *Cancer Research*. Dr Lönn has denied any wrongdoing and has objected to the formal handling of the case. □

In brief

University panel clears "ME" researcher: A panel of inquiry set up by the University of Glasgow into research carried out by Professor Peter Behan has concluded that there was no intention to deceive and that mistakes were the result of a lack of attention to detail. His errors had come to light during a High Court case examining the effects of organophosphate poisoning (2 August, p 271).

Surgeon receives disciplinary warning: Michael Williams, a consultant vascular surgeon at Mayday Hospital in Croydon, was given a formal warning for allowing his 16 year old daughter to help him in an operation.

***E coli* genome mapped:** United States researchers have reported the entire genetic sequence of *Escherichia coli*, which they say should stimulate further research into this important experimental organism (*Science* 1997;277:1453-81).

Paracetamol to be sold in smaller packs: The British government has announced that the size of packs of paracetamol and aspirin will be reduced from September 1998 in a drive to reduce the number of overdoses. The plans were first announced last year (30 November 1996, p 1352).

Hay fever medicine to be prescription only: Terfenadine, a non-sedating antihistamine, will be available only on prescription from 16 September 1997 after reports of serious heart rhythm disorders when the drug is incorrectly used (3 May, p 1299).

FDA repeats warnings about appetite suppressants: The Food and Drug Administration in the United States has given further warnings about the popular appetite suppressants fenfluramine and phentermine after reports of additional cases of valvular heart disease in women receiving the drugs. So far, 82 cases of endomyocardial fibrosis have been reported with the drugs.

Florida wins huge award from tobacco firms

Fred B Charatan, *Florida*

The tobacco industry has agreed to pay the state of Florida $11.3bn (£7.1bn) to settle the legal battle over liability for smoking related illnesses.

After signing the agreement in Palm Beach, Governor Lawton Chiles said: "Our long and difficult four year journey down Tobacco Road has come to a victorious end. The tobacco industry has conceded defeat. We have a settlement of historic proportions."

The money, to be paid over 25 years, will be used by the state to recoup Medicaid expenses for treating smoking related illnesses at an estimated cost of $1m a day. It will also fund a pilot antismoking campaign aimed at teenagers, children's mental health services, and other health related services.

Key provisions of the settlement require that cigarette billboards should be pulled down, starting with signs within 1000 feet (3280 m) of schools, vending machines removed from places where children have access, and tobacco advertising banned in open air or enclosed arenas for sports events.

Florida is the second state to reach a settlement with tobacco companies. In June Mississippi agreed a settlement of $3.3bn—the lesser amount reflecting the state's smaller population. Both states will now be excluded from the so called tobacco pact, in which five major tobacco companies agreed to pay $368.5bn to settle lawsuits brought by smokers and 40 states to recoup Medicaid expenses for treating smoking related illnesses (26 April, p 1217). Congress and President Bill Clinton are currently reviewing the national settlement.

The breakthrough that led to the settlement is believed to have resulted from statements from top tobacco executives given in pretrial testimony. Geoffrey Bible, chairman of Philip Morris, the largest cigarette manufacturer in the United States, said that cigarettes "might have" killed 100 000 Americans. The following day Ronald Motley, a lawyer for the state of Florida, asked Steven Goldstone, chairman of R J R Nabisco and a former smoker, whether he believed that smoking caused disease. Mr Goldstone replied: "I have always believed that smoking plays a part in causing lung cancer. What that role is, I don't know, but I do believe it." □

First rise in cot deaths for five years

John Warden,
parliamentary correspondent, BMJ

The downward trend in the number of deaths from the sudden infant death syndrome in England and Wales was reversed in 1996, with a rise to 441 deaths, or 0.7 per 1000 live births, a slight increase on the 1995 figure of 0.6, which was the lowest ever recorded. Estimated figures of 43 cot deaths in Scotland and 15 in Northern Ireland raise the United Kingdom's total to 499, or almost 10 a week.

The rate of sudden infant deaths has remained fairly steady after falling 50% between 1991 and 1993 from 1.4 to 0.7 per 1000 live births, official statistics show.

The Foundation for the Study of Infant Deaths said that it hoped the increase in 1996 would turn out to be a "blip" but warned that it might be a sign of complacency after the successes of previous years.

An analysis by the Office for National Statistics shows that in 1996, as in previous years, the rate of sudden infant deaths was highest for mothers aged under 20 and for babies born outside marriage (1.5 per 1000 live births). The lowest rate was for babies born inside marriage (0.4 per 1000).

Among the babies who died of the syndrome, the rate in 1996 was greatest for very low birthweight babies (under 1500 g). This was nearly eight times the rate for babies weighing 3500 g or more at birth. Sudden infant deaths were more common among boys than girls—between 1992 and 1996, 61% of deaths occurred among boys, though boys comprised 51% of all live births. In the past five years, 52% of deaths were among babies aged under 3 months and 85% among babies under 6 months. □

NIGEL BARKLIE/IMPACT

Campaigners warn against complacency over cot death

The 10th world conference on tobacco or health was held in Beijing last month. Richard Tomlinson reports

Smoking death toll shifts to third world

HUTCHISON PHOTO LIBRARY

The smoking epidemic in China has developed faster than expected

The ever rising number of deaths from tobacco related disease will shift markedly from the developed to the developing world over the next three decades.

Grim statistics presented by Richard Peto, professor of medical statistics at Oxford University, estimated that annual tobacco related deaths worldwide had been 3 million a year in 1990, rising to 3.5 million this year, and would hit 10 million some time between 2025 and 2030.

Most marked was the huge jump expected in poorer countries. In 1990 about one million tobacco related deaths were in the developing world, but this would increase to 7 million soon after 2025. The large gains in combating infectious diseases in the developing world were at risk of being eclipsed by smoking related deaths, the conference was warned.

Professor Peto highlighted new data for China which showed that the tobacco epidemic had developed faster than had been earlier forecast. New studies estimated that there were already 0.7 million tobacco related deaths a year in China (0.6 million in men and 0.1 million in women). "China already has more tobacco deaths than any other country," said Professor Peto. By 2025, he expected up to 3 million tobacco related deaths a year in China.

Professor Judith Mackay, the Hong Kong based director of the Asian Consultancy on Tobacco Control, said that there are currently 1.1 billion smokers worldwide, but she estimated that by 2025 this would grow to 1.64 billion owing to longer lifespans, bigger populations, and more women smokers. The number of smokers in developing countries would rise from 800 million now to 1.4 billion by 2025. Healthcare facilities in poorer countries would be "hopelessly inadequate" to cope, she said.

More research into the effects of tobacco in the developing world is also needed. Professor Peto pointed out that the pattern of tobacco related deaths in China is very different from that in the West. Some 45% of tobacco related deaths in China involved chronic obstructive pulmonary disease, compared with 15% in developed countries. Lung cancer accounted for 15% of China's tobacco related deaths compared with 25% in the West. Stroke and ischaemic heart disease each accounted for 5-8% of the deaths, whereas in the West these together account for nearly half, he said. Tobacco related liver and stomach cancers were also far higher in China. □

US settlement harms rest of the world

The proposed $368.5bn (£230bn) legal settlement between 40 states and the tobacco industry in the United States was heavily criticised for doing nothing to limit the activities of the tobacco giants abroad.

The tobacco deal (26 April, p 1217) was the hottest political subject at the conference, and organisers said that no other topic had prompted as many submissions. As the domestic market has declined over the past 20 years, cigarette exports have quadrupled—nearly one third of the cigarettes made in the United States are exported.

"If the settlement goes through, we have the potential to see children on the streets of Manila today paying for Mississippi medical bills in 10 to 20 years time," said Gregory Connolly, director of the Massachusetts tobacco control programme.

The final conference resolution avoided naming the United States directly but called for governments to ensure that any tobacco settlements "do not contribute to an increase in the worldwide epidemic of tobacco related death and disease." Settlements should "not inhibit full public scrutiny of the past, present, and future activities of the tobacco industry" and must protect the legal rights of those not party to the agreement.

Stanton Glantz, professor of medicine at the University of California, and an outspoken critic of the American settlement, said: "If you apply these standards to the US deal, it does not come close to passing."

Frank Chaloupka, an economist at the University of Illinois, said that when American cigarette companies used trade legislation to force open the markets of South Korea, Thailand, Taiwan, and Japan in the 1980s the result was a surge in tobacco advertising and an increase in smoking rates. □

Economic argument is the key to tobacco control

Establishing the real economic impact of smoking is the key to persuading developing countries to adopt tobacco control measures, said Professor Judith Mackay, director of the Asian Consultancy on Tobacco Control.

"What do we [the tobacco control lobby] most need in Asia? We need an economist," she told the conference. Professor Mackay, who works with almost every country in Asia, said that fear of the economic impact of reducing smoking was the biggest barrier she faced. "The governments are saying: what about the tax coming in, what about our tobacco farmers, what about the economy?"

"Governments need to understand that tobacco control is not only good for health, but it is actually good for the economy," Professor Mackay said. Prabhat Jha, a public health specialist at the World Bank, said that the global net economic cost of tobacco was now at least $200bn (£125bn) a year, equivalent to 1% of global gross domestic product. One third of that net loss was already incurred in developing countries.

China, where tobacco tax is the largest industrial source of government revenues, is one country that has conducted detailed economic studies. In 1993, tax revenues from cigarettes were 41 billion yuan (£3.15bn), but total direct and indirect economic losses were estimated at 65 billion yuan. "It's exquisitely important to have that kind of economic analysis from the point of getting tobacco control action in place," said Professor Mackay. □

Thrombolysis in strokes carries large risk

Kamran Abbasi, *BMJ*

Thrombolysis in acute ischaemic stroke carries a substantial risk and uncertain benefit, according to a systematic review of the evidence.

In the United States tissue plasminogen activator (tPA) is licensed for use within three hours of a stroke, and its use in this setting is recommended by American medical organisations. However, Dr Joanna Wardlaw, senior lecturer in the department of neuroradiology at the University of Edinburgh, and her team of researchers, concludes that the evidence does not support such an approach and more randomised trials are needed (*Lancet* 1997;350:607-14).

Her team carried out a systematic review of 12 randomised controlled trials which included 3435 patients. By the end of the follow up period, the longest being six months, 22% of patients who had received thrombolysis had died, compared with 18.3% of controls. In trials that assessed death within the first two weeks of the stroke, thrombolysis was associated with almost a twofold increase in early deaths (20.9% compared with 11.8% of controls).

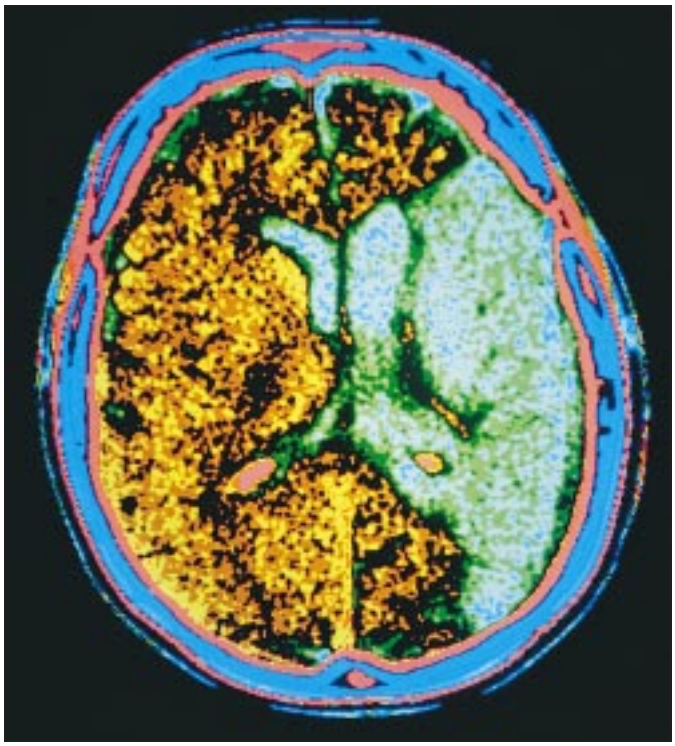
However, thrombolysis was of benefit in reducing the level of dependency of patients by the end of the follow up period. Of the patients who had received thrombolysis, 61.5% had died or were dependent on others, compared with 68% of controls. Dr Wardlaw said: "Thrombolysis caused an increase in early deaths mostly because of people having brain haemorrhages, but long term more are surviving in an independent state."

Differing thrombolytic agents, drug dosages, and criteria for thrombolysis were used in each trial. Before randomisation all the patients had computed tomography of the head, and then, depending on the trial, were given tPA, streptokinase, or urokinase.

The only encouraging trial of thrombolysis was conducted by the National Institute of Neurological Disorders and Stroke in the United States. Strict selection criteria were used in this study, with tPA being administered within three hours of onset of an ischaemic stroke. At three months those patients given tPA were a third more likely to have no or minimal disability than controls, and there was no significant difference in mortality.

Dr Wardlaw argues that the disparity in trial results may be due to differences in the trials' designs and baseline variables, and, as a consequence, further large randomised trials are needed to establish the true risk-benefit ratio of thrombolysis in acute ischaemic strokes.

"Undue emphasis is being placed on the trials using tPA," said Dr Wardlaw. "The American study supporting the use of tPA was done in specialist hospitals, and wide confidence intervals were used. When we look objectively at the evidence and the differences in methodology, tPA and streptokinase are probably performing similarly. The damning of streptokinase may be premature. It may be more dangerous, but the evidence is not there." □



CNRI/SPL

Computed tomography shows a cerebral infarction (on right)

US admits radiation experiments on 20 000 veterans

Deborah Josefson, *San Francisco*

The United States department of defence has revealed that as many as 20 000 service veterans and their family members are at risk of radiation induced illnesses stemming from experimental treatments they received from the 1940s to the 1960s.

The new revelations are the latest chapter in a lengthy report to Congress authorised by President Bill Clinton on human radiation experiments sponsored by the US government from 1944 to 1994. Many of the experiments were performed without the patients' consent, while others, though experimental, were considered state of the art medical practice.

The defence secretary, William Cohen, in a preface to the report, stated that most of the military projects conducted from 1944 to 1994 were "common and routine medical practices" and were listed in the "spirit of openness."

The military detailed that it sponsored about 2400 radiation experiments. One of the more popular projects carried out entailed the insertion of radium rods into the nostrils of servicemen with inner ear and sinus problems. Typically, a 50 milligram rod of radium was pushed through the patient's nostril and left to lie against the eustachian tube for up to 15 minutes at a time. This procedure was repeated every few months. The radiation induced mucosal shrinkage and allowed the ears and sinuses to drain. Between 8000 and 20 000 American air and submarine crew received such treatments, which allowed them to work in extremes of atmospheric pressures.

The Pentagon report said that the procedure was highly effective in curing ear problems and allowed thousands of air and submarine crew to function in the military. Many children with enlarged tonsils and adenoids also underwent the procedure. The thousands of military personnel who received such treatments are at increased risk of head and neck cancers.

Another project listed was one in which conscientious objectors fulfilled their service obligations by volunteering for ingesting irradiated foods. The Pentagon report said that about 500 projects were conducted between 1944 and 1974, and an additional 1900 experiments were conducted more recently, between 1974 and 1994. Currently experiments are under strict federal supervision, and with the full knowledge and consent of experimental subjects.

In 1995 a government advisory panel determined that the United States should offer compensation to participants in and survivors of the radiation experiments. Last March $6.5m (£4m) was given in compensation to 16 people who received plutonium injections in cold war radiation experiments. The number of claims against the government are sure to increase after these latest revelations. □

NHS plans for winter pressures

John Warden,
parliamentary correspondent, BMJ

Adequate provision for emergency care, with no sudden bar on admissions, is to be the British government's priority for the NHS in the coming winter.

The health secretary, Frank Dobson, last week urged everyone involved in the delivery of care to join forces to prepare for the pressures that winter inevitably brings on health and social services and to manage them with care and compassion.

The emphasis for winter planning is to be on joint working between the NHS and local authorities to achieve a "seamless service" in hospital and community care.

In a letter to health authorities, trusts, and local councils, Mr Dobson states that the coming months will call for truly integrated planning and action. He expects all agencies to develop a realistic strategy to manage winter demand for hospital services, with effective discharge arrangements for patients who need community care.

Mr Dobson sets out three expectations of the NHS for the winter. Firstly, there should be adequate provision for emergency care. Secondly, hospitals and their accident and emergency departments must not unilaterally close to emergency admissions. Thirdly, health authorities must share the risks faced by trusts in meeting unpredictable demand and improving cooperation with social services departments.

The health secretary acknowledges the pressures that many authorities are already working under and says that he is determined to ensure that short term problems do not constantly recur. He promises further action to improve working across the boundary between community and continuing health care. □

Canadian doctors' leader calls for more central funding

David Woods, *Philadelphia*

The new president of the Canadian Medical Association, Dr Victor Dirnfeld, says that Canada's publicly financed universal healthcare system is suffering from serious underfunding, which has led to poorer access to services, lengthening waiting lists, and a disaffected medical profession.

Dr Dirnfeld has long called for a parallel private healthcare system in Canada. However, in his inaugural speech he said that he would shelve this personal view to "reflect, represent, and promote the official views of this organisation." The Canadian Medical Organisation strongly favours the existing payment mechanism and is calling for major increases in government funding.

But many Canadians have already built a private system of sorts, spending an estimated $C1.4bn ($1bn, £0.6bn) last year on health care in the United States. With waiting times up 10-15% in the past year alone, Dr Dirnfeld believes there is an urgent need to infuse money into the domestic healthcare system.

When the Canadian Medicare programme came into being almost 30 years ago, the federal government shared its costs equally with the provinces. Today, the federal portion is down to 20%. This has resulted in a frenzy of cost cutting, elimination of services, a disgruntled public, and a beleaguered medical profession. Last year, more Canadian doctors than ever chose to emigrate; most of them were primary care doctors from rural areas.

Dr Dirnfeld's two main goals are to restore the level of funding from Ottawa—something that federal health minister Allan Block (also new to his job) has admitted needs attention—and to shore up the sagging morale of the nation's doctors. Those doctors, says Dr Dirnfeld, feel that they are marginalised, not consulted by policymakers and decision makers, and that their advice is ignored and their positions not infrequently taken over by lesser trained allied professionals. Not only that, but under a single payer system they have seen their incomes eroded severely. "What troubles me most is the mood of despondency and the sense of anger articulated by our colleagues across the land," he said.

Dr Dirnfeld is quick to point out, though, that the doctors' biggest concern is more about lack of cash in the system as a whole, leading to not being able to book catheterisation time or surgery within reasonable time frames. □

JOHN HRYNIUK

Dr Victor Dirnfeld says doctors feel marginalised

Anonymous AIDS testing in Hungary to end

Carl Kovac, *Budapest*

The Hungarian parliament is considering a new law that would force people who test positive for HIV infection to supply their names and other personal data. The proposals have been criticised by the parliamentary ombudsman and doctors who fear that an end to anonymous AIDS testing would deter those at most risk.

The National Institute of Public Health estimates that about 4000 people in Hungary are HIV positive. Three anonymous testing centres have been operating for nearly 10 years, and people attending other centres may also request anonymity.

"Anonymous testing began in 1988, and there were only 75 patients that year. Last year there were 2500. In these nine years, we have had 11700 patients. Of these, 78 tested HIV positive," said Dr János György Kiss, project coordinator of the anonymous AIDS counselling service.

The law, introduced by the Ministry of Welfare and due to go into effect on 1 January 1998, has been criticised by the parliamentary ombudsman, László Matjéni. He said that the draft law "is poorly conceived and impossible to put into practice."

Dr Kiss said: "Already people are asking how long they can still apply for anonymous testing. I believe this will keep away people in high risk groups. It's bad because there has been an increase in the number of people who have been coming in for tests. Now, those who might be infected, especially drug users, might stay away."

Dr Eszter Ujhelyi, the secretary of the national AIDS committee and head of the HIV confirmation and diagnostic division of the national blood transfusion service, said that his committee would be examining the draft law in November and putting forward recommendations. "The question is," he said, "who will have a right to ask for data involving patients with AIDS? We want to assure patients' privacy." □

NHS needs a sense of direction

Linda Beecham, *BMJ*

Representatives of NHS authorities and trusts have called for clear leadership and a sense of direction if the service is to continue to provide a world class service and not drift.

The NHS Confederation says that direction is needed "at the earliest possible opportunity" if the government is to move away from the competitive internal market. Authorities and trusts need to know whether there will be a contracting round under the market system next year. Although the government has promised a white paper in the autumn, the health secretary has said that no national changes will be made until a range of pilot studies have been evaluated. In its consultation document *Towards the 21st Century: A Way Forward for the NHS* the confederation warns against over-reliance on pilot studies.

The report says that painful priority setting decisions have to be faced and that there is a need for clear national guidance on what the NHS is, and is not, expected to provide. Services are already being rationed and unless the NHS received annual funding increases of at least 3% above inflation rationing would increase. The BMA has opposed the report's suggestion that an overall cash limit should be applied to the whole of the NHS, with the same formula being applied to primary and secondary care. A spokesperson said, "General practice is a demand led service ... it is the safety valve of the NHS, and any attempt to provide a total cap on its spending would be against the interests of patients."

The confederation suggests a system of accreditation to ensure that all services meet minimum standards. Although the report supports the government's public health initiative and the recognition that all sectors of government needed to address health inequalities, it says that agencies needed to be empowered to work more closely together. It also calls for a more clearly defined process for private finance initiative feasibility studies and tendering which all trusts could follow.

A Department of Health spokesperson said that guidance on the 1998-9 contracting round would be issued shortly and would represent a radical shift from the market approach. "We and the confederation are in full agreement on the need to replace the internal market and move away from the idea that the NHS is a commercial organisation," the spokesperson said. □

Towards the 21st Century: A Way Forward for the NHS is available from the NHS Confederation, Birmingham Research Park, Vincent Drive, Birmingham B15 2SQ, price £10.

Palestinian man shackled in Jerusalem hospital

Judy Siegel-Itzkovich, *Jerusalem*

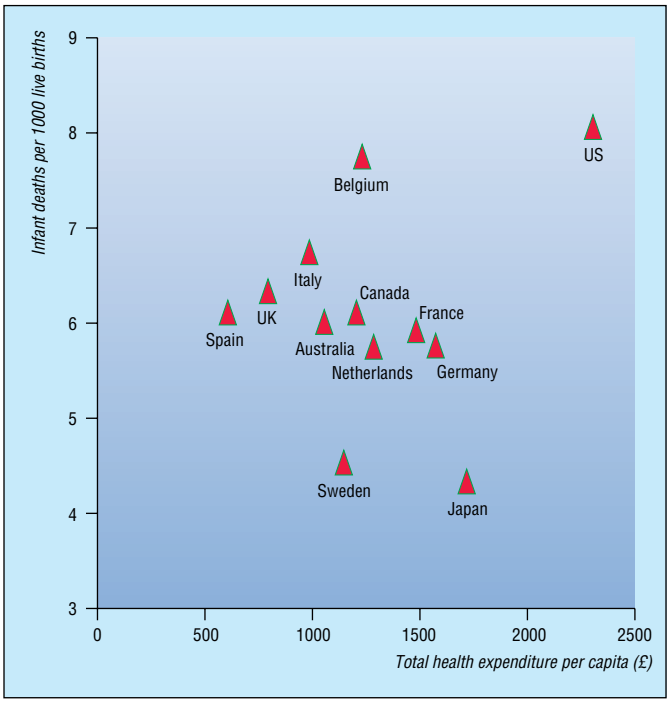
A Palestinian man belonging to the radical organisation Hamas and awaiting trial for acts of terrorism has been shackled to his hospital bed while receiving treatment. The incident has been criticised by human rights organisations and the Israel Medical Association.

Managers at the Hadassah University Hospital in Jerusalem said that, although they were against shackling patients, it had not jeopardised the man's treatment in any way. The 23 year old man, Bassem Ali, from Bethlehem, was undergoing treatment for anaemia and complications of diabetes due to the inherited blood disease thalassaemia. After his discharge he was returned to prison.

After the incident the Israel Medical Association sent a letter of protest to the defence minister, Yitzhak Mordechai. "We have warned several times in the past that this [shackling of prisoners] may endanger their health in certain cases and constitutes an ethical violation by the doctors involved. We have no doubt that you understand the great importance of observing medical ethics and protecting the rights of patients, as well as the need to preserve the image of Israel as an enlightened state." Supplying adequate guards round the clock, despite the expense, would eliminate the need for shackling, the organisation said.

Professor Shmuel Penchas, the director general of the Hadassah Medical Organisation, protested nearly a year ago about the shackling of security prisoners to their hospital beds after an incident involving two Palestinian teenagers. The youths, aged 13 and 16, had sustained serious stomach wounds during violent clashes with the Israel Defence Forces. The security authorities said that the youths were violent and extremely dangerous and that despite their injuries, they could grab a nurse or fellow patient and take them hostage. But after objections by doctors and human rights organisations, the cuffs were removed, and a soldier was posted at the entrance to the ward.

A justice ministry committee was established earlier this year to make recommendations on how to deal with dangerous prisoners in hospitals. Professor Penchas, who appeared before the committee, said that he understood the concerns of the security authorities but that tying patients to their bed was an indignity that might also have deleterious effects on treatment. The committee has not yet issued its conclusions. □



United Kingdom spends less than average on health care

Kamran Abbasi, *BMJ*

The United Kingdom devoted 6.9% of its gross domestic product to health care, compared with 9.5% in Germany, 14.3% in the United States, and 7.9% for comparable industrialised countries, according to the latest statistics from the Office of Health Economics.

In 1994 the United Kingdom spent £787 ($1259) per head on health care, whereas Germany and the United States spent £1552 and £2285 respectively. Higher spending, however, does not necessarily result in better outcomes, as indicated by infant mortality (see figure). Infant mortality in the United Kingdom is average despite below average spending, whereas the United States has both high spending and high infant mortality. □